

Appendix BAn Interface Description Language File for the COIGN System

```

////////////////////////////////////
//
//
//

#ifndef _COIGNIDL_IDL_
#define _COIGNIDL_IDL_

////////////////////////////////////
//
import "objidl.idl";
import "oaidl.idl";
import "oleidl.idl";

////////////////////////////////////
//
interface ICoignHost;
interface ICoignFactory;

////////////////////////////////////
//
typedef struct _CCallHistory
{
    IID                m_Iid;
    // 0 if function call.
    ULONG              m_nObjectClassification;           // 0 if
function call.
    ULONG              m_nMemberFunction;                // VA if
function call.
    ULONG              m_nStackFrame;                    // N/A,
Testing only.
    ULONG              m_n1;
} CCallHistory;

////////////////////////////////////
//
[object, uuid(7e78c140-5c6f-11d1-98ff-006097b010e3), pointer_default(unique),
local]
interface IPersistBuffer : IPersist
{
    HRESULT IsDirty(void);

    HRESULT Load([in, unique, size_is(cbData)] BYTE *pbData,
                 [in] ULONG cbData);
}

[object, uuid(7e78c141-5c6f-11d1-98ff-006097b010e3), pointer_default(unique),
local]
interface IPersistBufferInit : IPersistBuffer
{
    HRESULT InitNew(void);
}

```

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/////////////////////////////////////////////////////////////////
//
[object, uuid(9ceeb054-e415-11d0-98d1-006097b010e3), pointer_default(unique)]
interface ICoignHost : IUnknown
{
    /////////////////////////////////////////////////// Create Factory.
    //
    HRESULT          IsAlive(void);

    HRESULT          GetHostFactory([in] ULONG nHostId,
                                     [out] ICoignFactory **ppFactory);
    HRESULT          GetHostInternal([in] ULONG nHostId,
                                     [out] ICoignFactory
**ppFactory);

    HRESULT          SetHome([in] ICoignFactory *pHome,
                             [in] ULONG nHostId,
                             [in, size_is(cbData)] BYTE *pbData,
                             [in] ULONG cbData,
                             [in] ULONG nSystemObjectToken,
                             [in] ULONG nApplicationObjectToken);
    HRESULT          ClearHome(ULONG nKey);

    HRESULT          LogData([in, size_is(cbData)] BYTE *pbData,
                             [in] ULONG cbData);
    HRESULT          ExtraData([in] const CLSID *pClsid,
                              [in, size_is(cbData)] BYTE *pbData,
                              [in] ULONG cbData);
    HRESULT          MessageData([in, size_is(cbData)] BYTE *pbData,
                                 [in] ULONG cbData);

    HRESULT          GetCallHistory([in] ULONG nFrameAddress,
                                    [out] ULONG *pnRecords,
                                    [out, size_is(*pnRecords)]
CCallHistory **prgRecords);
};

[object, uuid(9ceeb056-e415-11d0-98d1-006097b010e3), pointer_default(unique)]
interface ICoignFactory : ICoignHost
{
    HRESULT          CoGetClassObject([in] ULONG nObjectClassification,
                                       [in] REFCLSID rclsid,
                                       [in] DWORD dwClsContext,
                                       /* PVOID */ DWORD pvReserved,
                                       [in] REFIID riid,
                                       [out, iid_is(riid)] void
**ppv);

    HRESULT          CoGetInstanceFromFile([in] ULONG nObjectClassification,
                                           [in, unique]
COSERVERINFO *pServerInfo,
                                           [in, unique] CLSID
*pClsid,
                                           [in] IUnknown
*punkOuter,
                                           [in] DWORD dwClsCtx,
                                           [in] DWORD grfMode,

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OLECHAR *pwszName,
MULTI_QI/ */
**ppv);

        HRESULT          CoGetInstanceFromIStorage([in] ULONG
nObjectClassification,
COSERVERINFO *pServerInfo,
*pClsid,
*punkOuter,
dwClsCtx,
*pstg,
/* was MULTI_QI/ */
iid_is(riid)] void **ppv);

        HRESULT          CoCreateInstance([in] ULONG nObjectClassification,
[in] REFCLSID Clsid,
[in] IUnknown *punkOuter,
[in] DWORD dwClsCtx,
[in] REFIID riid,
[out, iid_is(riid)] void
**ppv);

        HRESULT          CoCreateInstanceEx([in] ULONG nObjectClassification,
[in] REFCLSID Clsid,
[in] IUnknown *punkOuter,
[in] DWORD dwClsCtx,
[in, unique] COSERVERINFO
*pServerInfo,
[in] REFIID riid, /* was
MULTI_QI/ */
[out, iid_is(riid)] void
**ppv);

        HRESULT          StgCreateDocfile([in] ULONG nObjectClassification,
[in, unique, string] const
OLECHAR *pwcsName,
[in] DWORD grfMode,
[in] DWORD reserved,
[out] IStorage **ppstgOpen);

        HRESULT          OleCreate([in] ULONG nObjectClassification,
[in] REFCLSID rclsid,
[in] REFIID riid,
[in] DWORD renderopt,
[in, unique] FORMATETC *pFormatEtc,
[in] IOleClientSite *pClientSite,
[in] IStorage *pStg,

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                                [out, iid_is(riid)] void **ppv);

HRESULT OleCreateFromData([in] ULONG nObjectClassification,
                                [in] LPDATAOBJECT pSrcDataObj,
                                [in] REFIID riid,
                                [in] DWORD renderopt,
                                [in, unique] LPFORMATETC
pFormatEtc,
                                [in] LPOLECLIENTSITE
pClientSite,
                                [in] LPSTORAGE pStg,
                                [out, iid_is(riid)] void
**ppv);

HRESULT OleLoad([in] ULONG nObjectClassification,
                                [in] IStorage *pStg,
                                [in] REFIID riid,
                                [in] IOleClientSite *pClientSite,
                                [out, iid_is(riid)] void **ppv);

HRESULT CoRegisterClassObject([in] ULONG nObjectClassification,
                                [in] REFCLSID rclsid,
                                [in] LPUNKNOWN pUnk,
                                [in] DWORD dwClsContext,
                                [in] DWORD flags,
                                [out] LPDWORD
lpdwRegister);

HRESULT StgCreateDocfileOnILockBytes([in] ULONG
nObjectClassification,
                                [in]
ILockBytes *plkbyt,
                                [in] DWORD
grfMode,
                                [in] DWORD
reserved,
                                [out]
IStorage **ppstgOpen);

HRESULT StgOpenStorage([in] ULONG nObjectClassification,
                                [in, string] const OLECHAR
*pwcsName,
                                [in] IStorage *pstgPriority,
                                [in] DWORD grfMode,
                                [in, unique] SNB snbExclude,
                                [in] DWORD reserved,
                                [out] IStorage **ppstgOpen);

HRESULT StgOpenStorageOnILockBytes([in] ULONG
nObjectClassification,
                                [in] ILockBytes
*plkbyt,
                                [in] IStorage
*pstgPriority,
                                [in] DWORD
grfMode,

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snbExclude,                                [in, unique] SNB
                                             [in] DWORD
reserved,                                  [out] IStorage
**ppstgOpen);

        HRESULT          StgOpenAsyncDocfileOnIFillLockBytes([in] ULONG
nObjectClassification,

        [in] IFillLockBytes *pflb,

        [in] DWORD grfMode,

        [in] DWORD asyncFlags,

        [out] IStorage **ppstgOpen);

        HRESULT          StgGetIFillLockBytesOnILockBytes([in] ULONG
nObjectClassification,

        ILockBytes *pilb,                                [in]
                                                         [out]
        IFillLockBytes **ppflb);

        HRESULT          StgGetIFillLockBytesOnFile([in] ULONG
nObjectClassification,

        OLECHAR const *pwcsName,                        [in, string]
                                                         [out]
        IFillLockBytes **ppflb);

        HRESULT          BindMoniker([in] ULONG nObjectClassification,
                                     [in] LPMONIKER pmk,
                                     [in] DWORD grfOpt,
                                     [in] REFIID riid,
                                     [out, iid_is(riid)] void **ppvResult);

        HRESULT          CoGetObject([in] ULONG nObjectClassification,
                                     [in] LPCWSTR pszName,
                                     [in, unique] BIND_OPTS *pBindOptions,
                                     [in] REFIID riid,
                                     [out, iid_is(riid)] void **ppv);

        HRESULT          MkParseDisplayName([in] ULONG nObjectClassification,
                                     [in] LPBC pbc,
                                     [in] LPCOLESTR szUserName,
                                     [out] ULONG *pchEaten,
                                     [out] LPMONIKER *ppmk);

        HRESULT          MonikerRelativePathTo([in] ULONG nObjectClassification,
                                     [in] LPMONIKER pmkSrc,
                                     [in] LPMONIKER pmkDest,
                                     [out] LPMONIKER *ppmk,
                                     [in] BOOLEAN
dwReserved);

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    HRESULT          MonikerCommonPrefixWith([in] ULONG
nObjectClassification,
                                                    [in] LPMONIKER
pmkThis,
                                                    [in] LPMONIKER
pmkOther,
                                                    [out] LPMONIKER
*ppmk);

    HRESULT          CreateBindCtx([in] ULONG nObjectClassification,
                                     [in] DWORD reserved,
                                     [out] LPBC *ppbc);

    HRESULT          CreateGenericComposite([in] ULONG nObjectClassification,
                                             [in] LPMONIKER
pmkFirst,
                                             [in] LPMONIKER pmkRest,
                                             [out] LPMONIKER *ppmk);

    HRESULT          CreateClassMoniker([in] ULONG nObjectClassification,
                                         [in] REFCLSID rclsid,
                                         [out] LPMONIKER *ppmk);

    HRESULT          CreateFileMoniker([in] ULONG nObjectClassification,
                                        [in] LPCOLESTR lpszPathName,
                                        [out] LPMONIKER *ppmk);

    HRESULT          CreateItemMoniker([in] ULONG nObjectClassification,
                                       [in] LPCOLESTR lpszDelim,
                                       [in] LPCOLESTR lpszItem,
                                       [out] LPMONIKER *ppmk);

    HRESULT          CreateAntiMoniker([in] ULONG nObjectClassification,
                                        [out] LPMONIKER *ppmk);

    HRESULT          CreatePointerMoniker([in] ULONG nObjectClassification,
                                          [in] LPUNKNOWN punk,
                                          [out] LPMONIKER *ppmk);

    HRESULT          GetRunningObjectTable([in] ULONG nObjectClassification,
                                           [in] DWORD reserved,
                                           [out]
LPRUNNINGOBJECTTABLE *pprot);

    HRESULT          CreateDataAdviseHolder([in] ULONG nObjectClassification,
                                             [out]
LPDATAADVISEHOLDER* ppDAHolder);

    HRESULT          OleCreateEx([in] ULONG nObjectClassification,
                                [in] REFCLSID rclsid,
                                [in] REFIID riid,
                                [in] DWORD dwFlags,
                                [in] DWORD renderopt,
                                [in] ULONG cFormats,
                                [in, unique, size_is(cFormats)] DWORD*
rgAdvf,

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LPFORMATETC rgFormatEtc,
rgdwConnection,

HRESULT OleCreateFromDataEx([in] ULONG nObjectClassification,
                             [in] LPDATAOBJECT
                             [in] REFIID riid,
                             [in] DWORD dwFlags,
                             [in] DWORD renderopt,
                             [in] ULONG cFormats,
                             [in, unique,
                             size_is(cFormats)] DWORD* rgAdvf,
                             [in, unique,
                             size_is(cFormats)]
                             LPFORMATETC rgFormatEtc,
                             [in] IAdviseSink*
                             [out, size_is(cFormats)]
                             [in] LPOLECLIENTSITE
                             [in] LPSTORAGE pStg,
                             [out, iid_is(riid)] void
                             **ppv);

HRESULT OleCreateLinkFromData([in] ULONG nObjectClassification,
                               [in] LPDATAOBJECT
                               [in] REFIID riid,
                               [in] DWORD renderopt,
                               [in, unique] LPFORMATETC
                               [in] LPOLECLIENTSITE
                               [in] LPSTORAGE pStg,
                               [out, iid_is(riid)] void
                               **ppv);

HRESULT OleCreateLinkFromDataEx([in] ULONG
nObjectClassification,
pSrcDataObj,
pFormatEtc,
pClientSite,
**ppv);

HRESULT OleCreateLinkFromDataEx([in] ULONG
nObjectClassification,
pSrcDataObj,
renderopt,
size_is(cFormats)] DWORD* rgAdvf,
size_is(cFormats)]
[in] LPDATAOBJECT
[in] REFIID riid,
[in] DWORD dwFlags,
[in] DWORD
[in] ULONG cFormats,
[in, unique,
[in, unique,

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rgFormatEtc,
lpAdviseSink,
size_is(cFormats)] DWORD* rgdwConnection,
pClientSite,
void **ppv);

HRESULT OleCreateStaticFromData([in] ULONG
nObjectClassification,
pSrcDataObj,
renderopt,
LPFORMATETC pFormatEtc,
pClientSite,
void **ppv);

HRESULT OleCreateLink([in] ULONG nObjectClassification,
[in] LPMONIKER pmkLinkSrc,
[in] REFIID riid,
[in] DWORD renderopt,
[in, unique] LPFORMATETC
lpFormatEtc,
[in] LPOLECLIENTSITE pClientSite,
[in] LPSTORAGE pStg,
[out, iid_is(riid)] void **ppv);

HRESULT OleCreateLinkEx([in] ULONG nObjectClassification,
[in] LPMONIKER pmkLinkSrc,
[in] REFIID riid,
[in] DWORD dwFlags,
[in] DWORD renderopt,
[in] ULONG cFormats,
[in, unique, size_is(cFormats)]
DWORD* rgAdvf,
[in, unique, size_is(cFormats)]
LPFORMATETC rgFormatEtc,
rgdwConnection,
pClientSite,
[in] LPOLECLIENTSITE
[in] LPSTORAGE pStg,
[out, iid_is(riid)] void **ppv);

HRESULT OleCreateLinkToFile([in] ULONG nObjectClassification,

```



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```

lpszFileName,
lpFormatEtc,
pClientSite,

**ppv);

        HRESULT          OleCreateLinkToFileEx([in] ULONG nObjectClassification,
                                                [in] LPCOLESTR
lpszFileName,
                                                [in] REFIID riid,
                                                [in] DWORD dwFlags,
                                                [in] DWORD renderopt,
                                                [in] ULONG cFormats,
                                                [in, unique,
size_is(cFormats)] DWORD* rgAdvf,
                                                [in, unique,
size_is(cFormats)]
                                                LPFORMATETC rgFormatEtc,
lpAdviseSink,
                                                [in] IAdviseSink*
                                                [out, size_is(cFormats)]
DWORD* rgdwConnection,
                                                [in] LPOLECLIENTSITE
pClientSite,
                                                [in] LPSTORAGE pStg,
                                                [out, iid_is(riid)] void
**ppv);

        HRESULT          OleCreateFromFile([in] ULONG nObjectClassification,
                                                [in] REFCLSID rclsid,
                                                [in] LPCOLESTR lpszFileName,
                                                [in] REFIID riid,
                                                [in] DWORD renderopt,
                                                [in, unique] LPFORMATETC
lpFormatEtc,
                                                [in] LPOLECLIENTSITE
pClientSite,
                                                [in] LPSTORAGE pStg,
                                                [out, iid_is(riid)] void
**ppv);

        HRESULT          OleCreateFromFileEx([in] ULONG nObjectClassification,
                                                [in] REFCLSID rclsid,
                                                [in] LPCOLESTR
lpszFileName,
                                                [in] REFIID riid,
                                                [in] DWORD dwFlags,
                                                [in] DWORD renderopt,
                                                [in] ULONG cFormats,
                                                [in, unique,
size_is(cFormats)] DWORD* rgAdvf,

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size_is(cFormats)]
lpAdviseSink,
DWORD* rgdwConnection,
pClientSite,
**ppv);

        HRESULT          OleLoadFromStream([in] ULONG nObjectClassification,
                                              [in] LPSTREAM pStm,
                                              [in] REFIID riid,
                                              [out, iid_is(riid)] void
**ppv);

        HRESULT          OleGetClipboard([in] ULONG nObjectClassification,
                                           [out] LPDATAOBJECT* ppDataObj);

        HRESULT          CreateOleAdviseHolder([in] ULONG nObjectClassification,
                                                [out] LPOLEADVISEHOLDER*
ppOAHolder);

        HRESULT          OleCreateDefaultHandler([in] ULONG
nObjectClassification,
                                              [in] REFCLSID clsid,
                                              [in] LPUNKNOWN
pUnkOuter,
                                              [in] REFIID riid,
                                              [out, iid_is(riid)]
void **ppObj);

        HRESULT          OleCreateEmbeddingHelper([in] ULONG
nObjectClassification,
                                              [in] REFCLSID
clsid,
                                              [in] LPUNKNOWN
pUnkOuter,
                                              [in] DWORD flags,
                                              [in] LPCLASSFACTORY
pCF,
                                              [in] REFIID riid,
                                              [out, iid_is(riid)]
void **ppObj);

        HRESULT          OleRegEnumFormatEtc([in] ULONG nObjectClassification,
                                              [in] REFCLSID clsid,
                                              [in] DWORD dwDirection,
                                              [out] LPENUMFORMATETC*
ppenum);

        HRESULT          OleRegEnumVerbs([in] ULONG nObjectClassification,
                                           [in] REFCLSID clsid,
                                           [out] LPENUMOLEVERB* ppenum);

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};

```

//////////////////////////////////// Logger Interfaces.
//

```

```

interface ICoignLogger;
interface ICoignLoggerObject;
interface ICoignLoggerInterface;

```

```

enum {
    ECoignFid_Application                = 9000,
    ECoignFid_System                    = 9001,

    ECoignFidCoGetClassObject            = 9002,
    ECoignFidCoGetInstanceFromFile        = 9003,
    ECoignFidCoGetInstanceFromIStorage    = 9004,
    ECoignFidStgCreateDocfile            = 9005,
    ECoignFidCoCreateInstanceEx          = 9006,
    ECoignFidCoRegisterClassObject        = 9008,
    ECoignFidStgCreateDocfileOnILockBytes = 9009,
    ECoignFidStgOpenStorage               = 9010,
    ECoignFidStgOpenStorageOnILockBytes    = 9011,
    ECoignFidStgOpenAsyncDocfileOnIFillLockBytes = 9012,
    ECoignFidStgGetIFillLockBytesOnILockBytes = 9013,
    ECoignFidStgGetIFillLockBytesOnFile    = 9014,
    ECoignFidBindMoniker                  = 9015,
    ECoignFidCoGetObject                  = 9016,
    ECoignFidMkParseDisplayName            = 9017,
    ECoignFidMonikerRelativePathTo         = 9018,
    ECoignFidMonikerCommonPrefixWith       = 9019,
    ECoignFidCreateBindCtx                 = 9020,
    ECoignFidCreateGenericComposite        = 9021,
    ECoignFidCreateClassMoniker            = 9022,
    ECoignFidCreateFileMoniker             = 9023,
    ECoignFidCreateItemMoniker             = 9024,
    ECoignFidCreateAntiMoniker             = 9025,
    ECoignFidCreatePointerMoniker           = 9026,
    ECoignFidGetRunningObjectTable         = 9027,
    ECoignFidCreateDataAdviseHolder        = 9028,
    ECoignFidOleCreate                     = 9029,
    ECoignFidOleCreateEx                   = 9030,
    ECoignFidOleCreateFromData             = 9031,
    ECoignFidOleCreateFromDataEx           = 9032,
    ECoignFidOleCreateLinkFromData         = 9033,
    ECoignFidOleCreateLinkFromDataEx       = 9034,
    ECoignFidOleCreateStaticFromData       = 9035,
    ECoignFidOleCreateLink                 = 9036,
    ECoignFidOleCreateLinkEx               = 9037,
    ECoignFidOleCreateLinkToFile           = 9038,
    ECoignFidOleCreateLinkToFileEx         = 9039,
    ECoignFidOleCreateFromFile             = 9040,
    ECoignFidOleCreateFromFileEx           = 9041,
    ECoignFidOleLoad                       = 9042,
    ECoignFidOleLoadFromStream             = 9043,
    ECoignFidOleGetClipboard                = 9044,
    ECoignFidCreateOleAdviseHolder          = 9045,
    ECoignFidOleCreateDefaultHandler        = 9046,
    ECoignFidOleCreateEmbeddingHelper       = 9047,

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ECoignFidOleRegEnumFormatEtc          = 9048,
ECoignFidOleRegEnumVerbs              = 9049,
ECoignFidOleCreateFontIndirect        = 9050,
ECoignFidOleCreatePictureIndirect     = 9051,
ECoignFidOleLoadPicture               = 9052,
ECoignFidOleLoadPicturePath           = 9053,
ECoignFidOleLoadPictureFile           = 9054,
ECoignFidCoCreateInstance              = 9055,

ECoignFixMaximumValue

};

[object, local, uuid(9ceeb060-e415-11d0-98d1-006097b010e3),
pointer_default(unique)]
interface ICoignLogger : IUnknown
{
    HRESULT          Reset();
    HRESULT          Flush();

    HRESULT          EnableRecord();
    HRESULT          DisableRecord();
    HRESULT          TestRecord();

    HRESULT          LogExtraData([in] const CLSID *pClsid,
                                [in, size_is(cbData)] BYTE *pbData,
                                [in] ULONG cbData);

    HRESULT          CreateThread([out] ULONG *pnThreadToken);
    HRESULT          DeleteThread([in] ULONG nThreadToken);

    HRESULT          CreateObject([in] ULONG nThreadToken,
                                [in] ULONG nCreatorObjectToken,
                                [in] ULONG nCoignFid,
                                [in] ULONG nObjectClassification,
                                [in] const CLSID *pClsid,
                                [out] ULONG *pnObjectToken);

    HRESULT          DeleteObject([in] ULONG nThreadToken,
                                [in] ULONG nObjectToken);

    HRESULT          SetObjectClass([in] ULONG nObjectToken,
                                [in] const CLSID *pClsid);

    HRESULT          SetObjectConstraint([in] ULONG nObjectToken,
                                [in] ULONG
nObjectConstraint);

    HRESULT          CreateInterface([in] ULONG nThreadToken,
                                [in] ULONG nObjectToken,
                                [in] ULONG nInterfaceType,
                                [out] ULONG *pnInterfaceToken);

    HRESULT          DeleteInterface([in] ULONG nThreadToken,
                                [in] ULONG nObjectToken,
                                [in] ULONG nInterfaceToken);

    HRESULT          SetInterfaceConstraint([in] ULONG nThreadToken,
                                [in] ULONG
nCallerObjectToken,
                                [in] ULONG
nObjectToken,

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nInterfaceToken,
nInterfaceConstraint);

HRESULT Enter([in] ULONG nThreadToken,
               [in] ULONG nCallerObjectToken,
               [in] ULONG nObjectToken,
               [in] ULONG nInterfaceToken,
               [in] ULONG nFunction,
               [out] ULONG *pnCallToken,
               [out] LONGLONG *pllEnterCycle);

HRESULT Leave([in] ULONG nThreadToken,
               [in] ULONG nObjectToken,
               [in] ULONG nInterfaceToken,
               [in] ULONG nCallToken,
               [in] ULONG nInBytes,
               [in] ULONG nInUncertainty,
               [in] ULONG nOutBytes,
               [in] ULONG nOutUncertainty,
               [in] LONGLONG llEnterCycle,
               [in] LONGLONG llInnerCycles,
               [in] HRESULT hrResult,
               [out] LONGLONG *pllOuterCycles);

HRESULT LoadModule([in] ULONG dwBeg,
                   [in] ULONG dwEnd,
                   [in, string] OLECHAR *pwszModule,
                   [out] ULONG *pnModuleToken);

HRESULT SetObjectModule([in] ULONG nObjectToken,
                        [in] ULONG nModuleToken);
};

////////////////////////////////////
//
[object, local, uuid(9ceeb071-e415-11d0-98d1-006097b010e3),
pointer_default(unique)]
interface ICoignObjectClassifier : IUnknown
{
    HRESULT GetObjectClassification([in] ULONG nFunctionId,
                                     [in] ULONG nHistoryRecords,

[in,unique,size_is(nHistoryRecords)]

                                     const CCallHistory *pHistory,
                                     [in,unique] const CLSID

*pClsid,

                                     [out] ULONG

*pnObjectClassification);
};

[object, local, uuid(9ceeb080-e415-11d0-98d1-006097b010e3),
pointer_default(unique)]
interface ICoignInterfaceCallback : IUnknown
{
    HRESULT IncomingInterface([in] ULONG nObjectCallbackToken,
                              [in] const IID *pIid,
                              [in,out] PVOID *ppv);
};

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        HRESULT          OutgoingInterface([in] ULONG nObjectCallbackToken,
                                           [in] const IID *pIid,
                                           [in,out] PVOID *ppv);
};

[object, local, uuid(9ceeb081-e415-11d0-98d1-006097b010e3),
pointer_default(unique)]
interface ICoignInterfaceInformer : IUnknown
{
    HRESULT          IsValidInterface([in] ULONG nInterfaceTypeToken);

    HRESULT          GetInterfaceInfo([in] const IID *pIid,
                                      [out] ULONG
*pnInterfaceTypeToken);

    HRESULT          SetInterfaceCallback([in] ICoignInterfaceCallback
*pCallback);

    HRESULT          IsExtension([in] ULONG nBaseInterfaceTypeToken,
                                [in] ULONG nInterfaceTypeToken);

    HRESULT          GetInterfaceDescription([in] ULONG nInterfaceTypeToken,
                                           [out,
size_is(nMaxSize),string] OLECHAR *pwzName,
                                           [in] ULONG
nMaxSize);

    HRESULT          GetInterfaceIID([in] ULONG nInterfaceTypeToken,
                                    [out] const IID **ppIid);

    HRESULT          SizeIncomingDataLocal([in] ULONG nObjectCallbackToken,
                                           [in] ULONG
nInterfaceTypeToken,
                                           [in] ULONG
nMemberFunction,
                                           [in] ULONG
*pStackPointer,
                                           [in] ULONG *pStackFrame,
                                           [out] ULONG
*pnFrameSize,
                                           [out] ULONG *pnDataSize,
                                           [out] ULONG
*pUnCertainty);

    HRESULT          SizeIncomingDataRemote([in] ULONG nObjectCallbackToken,
                                           [in] ULONG
nInterfaceTypeToken,
                                           [in] ULONG
nMemberFunction,
                                           [in] ULONG
*pStackPointer,
                                           [in] ULONG
*pStackFrame,
                                           [out] ULONG
*pThunkAddr,
                                           [out] ULONG

```

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```

*pnFrameSize,                                [out] ULONG
*pnDataSize,                                [out] ULONG
*pnUncertainty);                             [out] ULONG

        HRESULT                               SizeOutgoingDataLocal([in] ULONG nObjectCallbackToken,
                                                                    [in] ULONG
nInterfaceTypeToken,                        [in] ULONG
nMemberFunction,                           [in] ULONG
*pStackPointer,                             [in] ULONG *pStackFrame,
                                                                    [out] ULONG
*pnFrameSize,                               [out] ULONG *pnDataSize,
                                                                    [out] ULONG
*pnUncertainty);

        HRESULT                               SizeOutgoingDataRemote([in] ULONG nObjectCallbackToken,
                                                                    [in] ULONG
nInterfaceTypeToken,                        [in] ULONG
nMemberFunction,                           [in] ULONG
*pStackPointer,                             [in] ULONG
*pStackFrame,                              [out] ULONG
*pnFrameSize,                              [out] ULONG
*pnDataSize,                               [out] ULONG
*pnUncertainty);
};

[object, local, uuid(9ceeb090-e415-11d0-98d1-006097b010e3),
pointer_default(unique)]
interface ICoignInternalInterface : IUnknown
{
};

[object, local, uuid(9ceeb091-e415-11d0-98d1-006097b010e3),
pointer_default(unique)]
interface ICoignUnknownInterface : IUnknown
{
};

[object, local, uuid(9ceeb092-e415-11d0-98d1-006097b010e3),
pointer_default(unique)]
interface ICoignConstraintInterface : IUnknown
{
};

```

//////////////////////////////////// Classes.

**Appendix B**

```
//  
#endif      // _COIGNIDL_IDL_
```